

Listing and Status of the Claims:

Claims 1-18. Canceled.

Claim 19 (currently amended). A method of manufacturing a high-pressure discharge lamp, comprising the steps of:

combining an electrode metal rod and a heat radiating coil into an electrode assembly to produce a melted tip end from a portion of said heat radiating coil with a protruding
~~machining said electrode assembly and leaving a region of an~~ end of said metal rod,
~~wherein said melted tip end has a length L1 and a diameter D1;~~ and

machining said ~~region of said~~ end of said metal rod into a nipple, wherein said nipple has a length L2 and diameter D2, and wherein a volume of said electrode assembly and said nipple has volume V1 and wherein a volume of said end and said nipple has a volume V2,
 and

wherein said machining step produces an electrode assembly where at least one of the conditions $0.15 \leq D2/D1 \leq 0.3$, $0.2 \leq L2/L1 \leq 0.4$, or $0.2 \leq V2/V1 \leq 0.4$ are met.

Claims 20-25. Canceled

Claim 26 (New). The method of claim 19 wherein said machining step produces an electrode assembly where all of the conditions $0.15 \leq D2/D1 \leq 0.3$, $0.2 \leq L2/L1 \leq 0.4$, and $0.2 \leq V2/V1 \leq 0.4$ are met.